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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/662,325

09/16/2003

Teruo Koike

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03/18/2005

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EXAMINER

LEE, Y MY QUACH

ART UNIT

PAPER NUMBER

2875

DATE MAILED: 03/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/662,325

Applicant(s)

KOIKE, TERUO

Examiner

Y Quach Lee

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☒ Claim(s) 4-7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the features of “2 to 12 sets in combinations of a single one of said light sources and a single one of said reflecting surfaces” as claimed in claim 1 and “... a light source holder formed into a substantially polygonal column shape ...” as claimed in claim 2 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled “Replacement Sheet” in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The disclosure is objected to because of the following informalities: Page 6, line 6, the reference numeral “22”, second occurrence, is incorrect and should be changed to “22a” in view of the “LED chips 22a” on line 5 of the same page and drawing figures 2 and 3. Appropriate correction is required.

Claim Objections

4. Claims 1 to 4 are objected to because of the following formalities: In claim 1, line 1, the term “realized using” is improper and it would appear that this term should be changed to “using”; lines 4 and 6, the term “light sources” should be changed to “LED arrays” to properly described the claimed invention; line 6, the term “characterized in that” does not conform to the

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U.S. standard practice and it is suggested that it should be changed to --wherein--. In claims 2 to 4, the term "further characterized in that" does not conform to the U.S. standard practice and it is suggested that it should be changed to --comprising-- or --wherein--. In claim 2, line 2, the term "source" is inaccurate and should be changed to --sources--; line 3, the term "and" should be inserted before the term "on" to properly describe the claimed invention. In claim 3, lines 2 to 4, the term "light source" should be changed to --LED array-- to clearly describe the claimed invention. In claim 4, the language "said shade is provided on the left and right sides ..." is incorrect because one shade can not be located at both the left and right sides of the light source holder. It would appear that the language on lines 2 to 3 in claim 4 should be changed to --said shade is provided on a left side of said light source holder, another shade is provide on a right side of said light source holder, and said shades comprising substantially vertical side surfaces--. Also, there is no clear antecedent basis for "said light source holder" with respect to claim 3 which depends on claim 1 (note that "a light source holder was first introduced in claim 2). Appropriate correction is required.

5. Claims 5 to 7 are objected to under 37 CFR 1.75 (c) as being in improper forms because a multiple dependent claim shall not serve as a basis for any other multiple dependent claims. See MPEP § 608.01(n). Accordingly, the claims 5 to 7 have not been further treated on the merits.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –
(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1 and 2 are rejected under 35 U.S.C. 102(e) as being anticipated by Martin et al.

Martin et al. show a vehicle lamp (200, 300, 800, 1000, 1200, 1300, 1600, 1700 1800 ... paragraph 0079, lines 4, 6, ...) comprising a plurality of light sources (figures 2(A, D, E), 3A, 8(A-D), 10(A-C), 16, 17, 18, 20, 21, 22) such as light emitting diode arrays disposing at least one or more light emitting diode chips (220, 222, 310-1, 310-2, 810-1 to 810-3, 1010-1 to 1010-4, 1210-1 to 1210-5, 1310-1 to 1301-6 ...) in a single row, reflecting surfaces (212, reflective

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segments, paragraph 0046, lines 2 to 3, 314-1, 314-3, 814-1 to 814-3, 1014-1 to 1014-4, 1214-1 to 1214-5, 1314-1 to 1314-6, ...) combined one to one correspondence with respective light sources and forming a prescribed light distribution pattern, and the arrays formed into a prescribed shape in a direction of light illumination and on a light source holder (206, 306, 806, 1006, 1206, 1306 ...) formed into a polygonal column shape (figures 12, 13 ...) having an axis parallel to the illumination direction with the reflecting surfaces encircle the light source holder. Martin et al. also show that any number of light emitting diodes can be mounted to the light source holder (paragraph 0044, lines 2 to 3), the light source holder can be made in a variety of shapes to provide a number of facet sides (paragraph 0043, lines 4 to 5), the luminous flux for a particular source length along a lamp axis can be increased by adding additional facet sides of the light holder and the light emitting diodes (paragraph 0044, lines 11 to 13), the size of the light emitting diode array determines the aspect ratio of the light emitting diode and the ratio can be changed to match a variety of focal lengths to conform to the dimensional and performance requirements to offer more mechanical freedom in the design of the lamp, each reflective surface receives light from and illuminated by light from the light emitting diodes on a facet side (paragraph 0011, lines 4 to 5, paragraph 0047, lines 4 to 5 ...), all of these descriptions therefore encompass and meet the limitation of "2 to 12 sets in combinations of a single one of the light sources and a single one of the reflecting surfaces" as claimed.

Double Patenting

8. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thornton*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

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Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

9. Claims 1 to 3 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 2, 4 and 9 of copending Application No. 2004/0223338 in view of Martin et al. This is a provisional obviousness-type double patenting rejection.

Claims 1, 2, 4 and 9 of '338 disclose the invention substantially as claimed in claims 1 to 3 with the exception of having 2 to 12 sets in combination of a single one of the light sources and a single one of the reflecting surfaces.

Martin et al. teach that any number of light emitting diodes can be mounted to a light source holder (paragraph 0044, lines 2 to 3), the light source holder can be made in a variety of shapes to provide a number of facet sides (paragraph 0043, lines 4 to 5), the luminous flux for a particular source length along a lamp axis can be increased by adding additional facet sides of the light holder and the light emitting diodes (paragraph 0044, lines 11 to 13), the size of the light emitting diode array determines the aspect ratio of the light emitting diode and the ratio can be changed to match a variety of focal lengths to conform to the dimensional and performance requirements to offer more mechanical freedom in the design of the lamp, each reflective surface receives light from and illuminated by light from the light emitting diodes on each facet side (paragraph 0011, lines 4 to 5, paragraph 0047, lines 4 to 5 ...), all of these descriptions encompass and meet the limitation of "2 to 12 sets in combinations of a single one of the light sources and a single one of the reflecting surfaces" to form an overall light distribution pattern.

It would have been obvious to one skilled in the art to provide the invention as claimed in claims 1, 2, 4 and 9 of '338 with 2 to 12 sets as claimed, as shown by Martin et al., so that the quantity of light of the light sources can be increased for enhancing the overall light distribution pattern.

10. Claim 4 would be allowable if rewritten to overcome the objection set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

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Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hung and Zhang (WO02/52190) are cited to show other pertinent light emitting diode arrays mounted on the light source holders with their respective reflecting surfaces to form the light distribution patterns, and Thominet is cited to show other pertinent light emitting diode arrays mounted on a light source holder with a shade laterally mounted to obstruct light from the light emitting diodes to produce a bright-dark limit of the light distribution pattern.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Y Quach Lee whose telephone number is 571-272-2373. The examiner can normally be reached on Tuesday and Thursday from 8:30 am to 4:30 pm.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Customer Service whose telephone number is 571-272-2815.

Y. Q.
March 8, 2005



Y Quach Lee
Patent Examiner
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